



COLORADO SHEEP AND LAMB LOSSES -- 2002

Colorado Agricultural Statistics Service

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Colorado farmers and ranchers lost 59,000 head of sheep and lambs to all causes in 2002, representing a total value of \$4.27 million, according to a survey conducted by the Colorado Agricultural Statistics Service in cooperation with the Colorado Sheep and Wool Authority. No survey was conducted for 2001, but a comparable survey for 2000 indicated that 53,000 head of all sheep and lambs, valued at \$4.02 million, were lost from all causes. The number of head lost was up 11 percent from 2000. The value of those losses was up 6 percent as the increased number lost more than offset the effects of lower average values for both sheep and lambs. The total inventory of all sheep and lambs at the beginning of 2002 was 370,000 head, down 16 percent from the total inventory of 440,000 head at the beginning of 2000. Compared with the beginning inventory for 2000, the 205,000 head of breeding sheep and lambs at the beginning of 2002 was down 2 percent from 210,000 head and the inventory of market sheep and lambs, at 165,000 head, was down 28 percent from 230,000 head. The 2002 lamb crop totaled 200,000 head, unchanged from the 2000 lamb crop. Total sheep and lamb death losses in 2002 accounted for 10.1 percent of the available supply of animals during the year compared with losses in 2000 representing 8.1 percent of the available supply.

Predators caused an estimated \$2.08 million in losses of sheep and lambs during 2002 compared with a value of \$1.49 million in 2000. They accounted for 28,000 head (47 percent of all losses) in 2002 compared with 19,500 head (37 percent of all losses) in 2000. Predator losses amounted to 4.8 percent of the available supply in 2002, up from the 3.0 percent of the sheep and lamb supply in 2000. Lamb losses by all predators amounted to 20,300 head in 2002 compared to 15,700 head in the previous survey year. Coyotes, the most damaging predator in each year, were responsible for 53 percent (10,800 head valued at \$707,400) of the lamb losses from predators and 23.5 percent of all lamb losses. Bears and fox were the next most damaging predators with those two animals claiming a combined total of 4,700 head of lambs and a combined loss value of \$307,900. Bears and coyotes were also the primary predators on sheep, with coyotes killing 3,500 sheep and bears killing 3,000 for a combined loss value of \$630,500. Dogs and mountain lions killed 2,200 head of sheep and lambs valued at \$169,300 during 2002, while losses from eagles and fox totaled 2,700 head valued at \$176,900. Nearly 85 percent of all predator losses occurred in the Northwest & Mountain and Southwest Districts where all of the major predators were active. All of the state's losses from eagles and mountain lions were in those two areas. Coyotes and dogs were the major predators in the Northeast District where most of the commercial feedlots are located. Dogs caused the major loss of sheep and lambs from predators in the San Luis Valley and in the Southeast Districts.

The total value of sheep and lamb losses from **non-predator causes** was estimated at \$2.20 million in 2002, down 13 percent from \$2.52 million in 2000. Non-predator losses of 31,000 head in 2002 represented 53 percent of all losses, down from 33,500 head (63 percent) in 2000. Losses from disease accounted for 33 percent of the total value of non-predator losses with weather related problems representing 24 percent. Disease claimed nearly 40 percent the lambs lost from non-predator causes but just over 11 percent of the mature sheep losses. Nearly 45 percent of the non-predator losses occurred in the Northeast District where disease and weather related problems are the major cause of loss in the state's commercial feedlots. Lambing problems accounted for \$338,600 of the total value of the non-predator losses with most of those occurring in the western portions of the state.

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SHEEP & LAMBS: Inventory, Death Losses, and Value of Losses, Colorado, 1997-2002 1/

Year	January 1 All Sheep & Lambs	Lamb Crop	Death Losses					
			Sheep	All Lambs			All Sheep & Lambs	
			Total Losses	Before Docking	After Docking	All Lambs	Total Loss	Percent of Supply <u>2/</u>
	1,000 Head		1,000 Head		1,000 Head		Percent	
1997	575	225	10	20	45	65	75	9.1
1998	575	220	10	15	40	55	65	8.0
1999	440	210	8	15	40	55	63	9.5
2000	440	200	9	14	30	44	53	8.1
2002	370	200	13	16	30	46	59	10.1
Year	Total Sheep & Lamb Losses By Cause				Value Of Losses			
	Predator Losses		Non-Predator Losses		Predator	Non-Predator	Total	
	Total Loss	Percent of Supply <u>2/</u>	Non- Predator	Percent of Supply <u>2/</u>				
	1,000 Hd.	Percent	1,000 Head		1,000 Dollars			
1997	34.0	4.1	41.0	5.0	2,944.0	3,511.0	6,455.0	
1998	27.0	3.3	38.0	4.7	1,966.5	2,728.5	4,695.0	
1999	23.0	3.5	40.0	6.0	1,635.5	2,837.5	4,473.0	
2000	19.5	3.0	33.5	5.1	1,492.5	2,523.0	4,015.5	
2002	28.0	4.8	31.0	5.3	2,076.5	2,197.5	4,274.0	

1/ No survey was conducted covering 2001.

2/ Supply includes sheep and lambs on hand January 1 plus lamb crop plus lamb losses before docking.

SHEEP AND LAMBS: Number of Head and Value of Loss by Cause, Colorado, 2000 and 2002 1/

Cause	Sheep				Lambs				Total Sheep & Lambs			
	No. Lost		Value <u>2/</u>		No. Lost		Value <u>2/</u>		No. Lost		Value <u>2/</u>	
	2000	2002	2000	2002	2000	2002	2000	2002	2000	2002	2000	2002
Predator:	1,000 Head		\$1,000		1,000 Head		\$1,000		1,000 Head		\$1,000	
Bear	1.4	3.0	142.1	291.0	2.5	3.3	176.2	216.2	3.9	6.3	318.3	507.2
Bobcat	...	0.3	...	29.1	...	0.6	...	39.3	...	0.9	...	68.4
Coyote	1.4	3.5	142.1	339.5	8.4	10.8	592.2	707.4	9.8	14.3	734.3	1,046.9
Dog	0.7	0.1	71.1	9.7	1.4	0.4	98.7	26.2	2.1	0.5	169.8	35.9
Eagle	...	...	...	...	0.5	1.3	35.2	85.2	0.5	1.3	35.2	85.2
Fox	...	...	...	...	0.8	1.4	56.4	91.7	0.8	1.4	56.4	91.7
Mountain Lion	0.3	0.7	30.5	67.9	0.7	1.0	49.4	65.5	1.0	1.7	79.9	133.4
Other Predator <u>3/</u>	...	0.1	...	9.7	1.4	1.5	98.7	98.3	1.4	1.6	98.7	108.0
Total Predator	3.8	7.7	385.7	746.9	15.7	20.3	1,106.8	1,329.7	19.5	28.0	1,492.5	2,076.5
Non-Predator:												
All Diseases	0.5	0.6	50.8	58.2	17.0	10.2	1,198.5	668.1	17.5	10.8	1,249.3	726.3
Weather related	0.2	0.4	20.3	38.8	3.5	7.5	246.8	491.3	3.7	7.9	267.1	530.1
Lambing problems	0.8	1.6	81.2	155.2	3.3	2.8	232.7	183.4	4.1	4.4	313.9	338.6
Old age	1.2	1.2	121.8	116.4	...	...	...	...	1.2	1.2	121.8	116.4
Being on back	0.2	0.1	20.3	9.7	...	0.1	...	6.6	0.2	0.2	20.3	16.3
Poisoning	0.6	1.1	60.9	106.7	0.6	1.0	42.3	65.5	1.2	2.1	103.2	172.2
Theft	...	...	...	...	...	0.3	...	19.7	...	0.3	...	19.7
Other causes <u>4/</u>	1.7	0.3	172.6	29.1	3.9	3.8	275.0	248.9	5.6	4.1	447.6	278.0
Total Non-Predator	5.2	5.3	527.8	514.1	28.3	25.7	1,995.2	1,683.4	33.5	31.0	2,523.5	2,197.5
Total All Causes	9.0	13.0	913.5	1,261.0	44.0	46.0	3,102.0	3,013.0	53.0	59.0	4,015.5	4,274.0

1/ Sheep value is based on a two year average value per head of ewes 1 year old and older; Value of \$101.50 for 2000; \$97.00 for 2002.

Lamb value is based on the marketing year average price received for a 90 pound lamb; Value of \$70.50 for 2000; \$65.50 for 2002.

2/ Totals may not add due to rounding. 3/ Includes unknown predator losses. 4/ Includes unknown non-predator losses.

SHEEP AND LAMBS: Percent of Head Loss Within Each Agricultural Statistics District, by Type of Predator, Colorado, 2002 1/

Cause	Agricultural Statistics District						State
	NW & Mountain	Northeast	East Central	Southwest	San Luis Valley	Southeast	
Predator:	Percent						
Bear.....	64.1	1.3	...	21.7	12.6	0.3	100.0
Bobcat.....	84.1	...	...	15.7	0.1	...	100.0
Coyote.....	64.2	9.9	0.8	14.1	8.5	2.5	100.0
Dog	23.4	6.7	...	29.2	32.6	8.0	100.0
Eagle	97.5	...	...	2.5	...	...	100.0
Fox	97.8	0.8	...	...	1.4	...	100.0
Mountain Lion	70.4	...	...	29.6	...	...	100.0
Other Predators <u>2/</u>	77.6	1.3	2.1	10.1	8.9	...	100.0
Total Predator.....	68.2	5.4	0.5	16.0	8.4	1.5	100.0

1/ Includes all lamb losses both before and after docking.

2/ Includes unknown predators.

SHEEP AND LAMBS: Percent of Head Loss Within Each Agricultural Statistics District, by Non-predator Causes, Colorado, 2002 1/

Cause	Agricultural Statistics District						State
	NW & Mountain	Northeast	East Central	Southwest	San Luis Valley	Southeast	
Non-Predator:	Percent						
All Diseases	5.8	75.5	2.4	6.8	6.1	3.4	100.0
Weather related causes	34.5	40.4	3.3	16.9	3.4	1.5	100.0
Lambing problems.....	30.2	8.5	4.7	37.8	14.5	4.3	100.0
Old age	22.0	13.0	15.2	24.7	7.8	17.3	100.0
Being on their back.....	2.7	...	1.6	50.0	35.9	9.8	100.0
Poisoning	82.9	...	2.4	10.5	.2	4.0	100.0
Theft	84.3	...	...	1.2	14.5	...	100.0
Other non-predator <u>2/</u>	5.1	60.1	2.5	19.0	10.6	2.7	100.0
Total Non-Predator	23.3	45.4	3.5	17.0	7.2	3.6	100.0

1/ Includes all lamb losses both before and after docking.

2/ Includes unknown non-predator causes.

SHEEP AND LAMBS: Percent of Head Loss by Cause and Size of Flock, Colorado, 2000-2002 1/

Cause	Stock Sheep Operations by Size of Flock						Commercial Feedlots		All Sizes	
	1 - 99		100 - 999		1,000 Plus					
	2000	2002	2000	2002	2000	2002	2000	2002	2000	2002
Predator:	Percent		Percent		Percent		Percent		Percent	
Bear.....	3.0	5.1	6.1	10.4	16.1	16.6	...	...	7.4	10.8
Bobcat.....	...	2.2	...	.2	.3	2.4	...	...	...	1.5
Coyote.....	20.1	25.3	25.1	24.4	29.6	32.7	3.9	4.4	18.5	24.3
Dog.....	7.9	2.5	12.5	3.4	2.2	.4	.7	.1	4.0	.9
Eagle.....	...	...	.6	1.5	2.6	3.8	...	...	.9	2.2
Fox.....	4.5	.2	1.6	1.4	2.2	3.9	...	...	1.5	2.3
Mountain Lion.....	...	1.3	2.6	4.0	3.8	4.2	...	...	1.9	2.9
Other Predator <u>2/</u>.....	.2	.9	.2	3.1	7.7	4.1	...	...	2.6	2.7
Total Predator:	35.7	37.5	48.7	48.4	64.5	68.1	4.6	4.5	36.8	47.5
Non-Predator:										
All Diseases.....	10.1	13.2	12.9	18.6	4.0	2.5	72.7	56.7	33.0	18.4
Weather related.....	10.4	17.7	10.0	7.6	2.6	9.6	15.4	22.6	7.0	13.3
Lambing problems.....	19.3	14.1	10.1	10.5	10.3	8.8	...	...	7.7	7.4
Old age.....	7.1	7.6	6.1	6.3	.8	1.1	...	...	2.3	2.1
Being on back.....	.9	.4	.7	1.2	.5	.2	...	...	.4	.3
Poisoning.....	4.2	1.8	1.8	.7	3.5	6.1	...	...	2.3	3.6
Theft.....	...	...	2.6	.7	...	.8	...	...	...	.5
Other non-predator <u>3/</u>	12.3	7.6	7.1	6.1	13.8	2.8	7.3	16.2	10.5	6.9
Total Non-Predator	64.3	62.5	51.3	51.6	35.5	31.9	95.4	95.5	63.2	52.5
Total All Causes	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

... = none reported or less than .05 percent of the total.

1/ Includes lambs before and after docking.

2/ Includes unknown predators.

3/ Includes unknown non-predator causes.